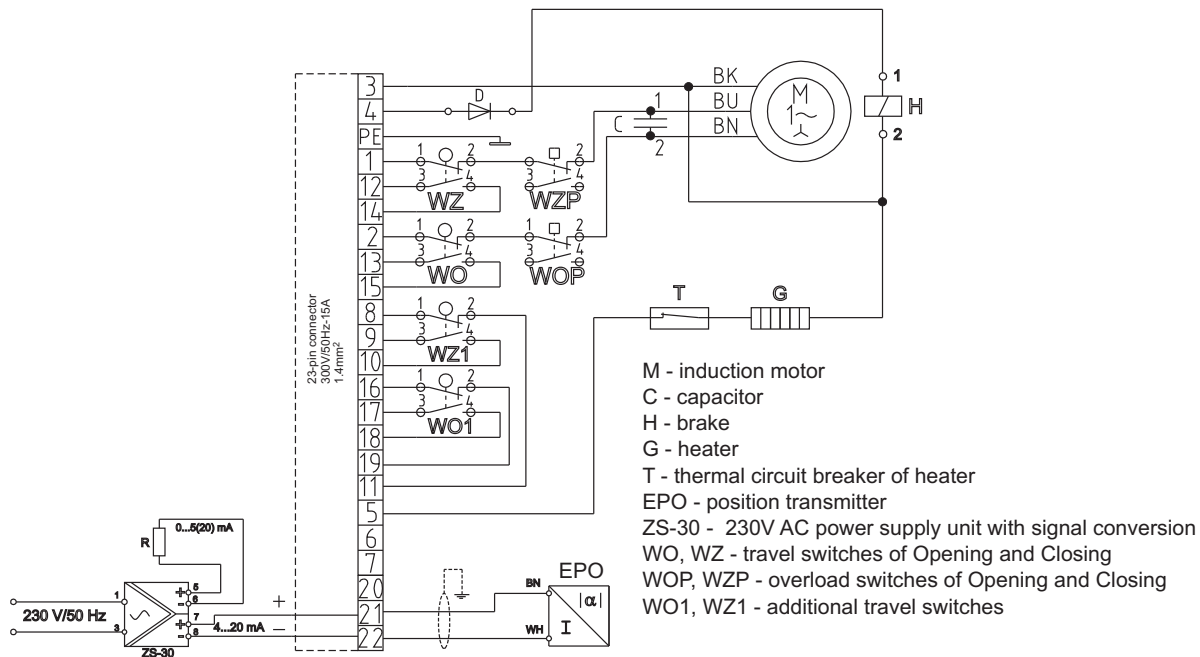


Electric circuit diagram of actuator ESW-30 with position transmitter EPO and power supply unit



REMARKS:

1. Power supply 230 V, 50 Hz between the terminals 3 and (2+4) causes the actuator movement, which corresponds to „Opening“.
2. Power supply 230 V, 50 Hz between the terminals 3 and (1+4) causes the actuator movement, which corresponds to „Closing“.
3. Electric shock protection is provided with connecting the protective earthing terminal (PE) to the external electric shock protection system.
4. Position indication of the actuator output element is given by means of the position transmitter EPO.

Flow control system: actuator + throttling valve

Application

Flow control systems are designed for changing the flow rate of a medium, keeping the required flow characteristics.

Design

The control system consists of the flap valve or throttling valve in order to change the resistance for a flowing medium and actuators designed for supply of mechanical energy necessary for their shifting.

Selection of throttling valve

Designing of the flow control system should be started from selecting the throttling valve. One can apply here the throttling valves produced by the „Zakład Automatyki POLNA S.A.“ type PRS. In order to correctly choose a throttling valve, one should specify the following parameters:

Parameters of throttling valve selection	
Nominal diameter DN	
Nominal pressure PN	
Temperature of the medium	
Kind of the medium	
Connecting flange type	

According to the given temperature and kind of the medium one chooses the sealing insert.

Technical parameters of throttling valves type PRS	
Nominal diameters	DN 40...300
Nominal pressures	PN 6...20
Ambient temperature (dependent of the sealing insert material)	TN - 40°...180°C

After a throttling valve is selected, depending on necessary torque, one selects the actuator. The actuator equipment and mechanical plus electric connectors can be a subject of separate agreements.

Ordering

The throttling valve can be specified by the customer, or selected on the basis of determined parameters.

The actuator is to be specified according to the Ordering Table.

When ordering the throttling valve and actuator, we make the actuator connections and settings, which guarantees a correct and reliable operation of the system.

